Fevga or Moultezim

A Backgammon Board Game Variant
Introduction, Rules and Tips for Basic Strategy

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Introduction:

Fevga is a variation of the game of backgammon. Fevga is played in Greece, in Turkey, where it is known as moultezim, and in Russia, where it is known as narde. Fevga is known as 31 ("weh-dow tla-teen") or tawla 31 in the countries of Egypt or Lebanon. In fevga, checkers are positioned at opposite corners of the backgammon board in the initial game setup. In tawla 31, the checkers are positioned on either the left top and bottom, or the right top and botom, sides of the board in the initial opening game position, instead of at diagonally opposite corners as in fevga. The greeks have a word called "tavli," which means the three backgammon games of backgammon, plakoto, and fevga. The Greeks play these three games back to back in a kind of tavli "marathon" in gatherings or coffee shops.

In fevga, unlike in backgammon, a checker cannot be hit and sent to the bar. Instead, a player uses blocks, which consist of a one or more checkers located on a position point, to try to down the opponent. A player's block cannot be landed on by the opponent, and vice versa. The object of fevga, like in backgammon, is to move all of one's checkers around the board to a goal quadrant, and bear off the checkers. The first to bear off the checkers wins the game. In fevga, unlike in plakoto, which is another backgammon variant, checkers cannot be trapped, but only blocked.

References:

There are not many books written about this game. For more information, see the books:

Backgammon Games and Strategies (1978) by Nicolas and Basil Tzannes   -or-
Fevga or Moultezim Board Game Strategy (2018) by Mamoun

or for some articles on neural nets and fevga game programming and strategy, see:

Papahristou, N. and Refanidis, I. On the Design and Training of Bots to Play Backgammon Variants,

Rules of Fevga:

(These rules are adapted from the digital manual of the program Palamedes, an open-source neural net program that plays plakoto, backgammon and fevga at a world-class level, developed by professor Nikos Papahristou. This is a good computer program for practicing these three Tavli games and learning basic skills and advanced strategy).

Setup: Each player starts with fifteen checkers, with one player's pieces placed at the top right of the board, and the other player's checkers placed at the lower left of the board, at diagonally opposite corners from each other. Both players move in the same direction, counterclockwise, around the board.

Object: The object of the game is to move all the checkers around the board and bear them off. The player starting at the top right bears off after collecting all checkers into the lower-right quadrant of the board. The player starting at the lower left bears off after collecting all checkers into the top left quadrant of the board.

To start: Both players roll one die and the higher number goes first. That player rolls the dice again to begin his turn. After the first game, the winner of the previous game goes first.

Movement: The roll of the dice indicates how many position points or pips forward the player is to move his checkers. The following rules apply:

--A player may only move a checker onto a point that is either empty, or is occupied by a player's own checker. A player may not move a checker onto a point that is occupied by one or more of the opponent's checkers. A block consists of one or more checkers on a point.

--Both numbers of a dice roll must be played if possible. For example, if a player rolls a 5 and 3, the player may move one checker five spaces to an open point and another checker three spaces to an open point, or the player may move the one checker a total of eight spaces to an open point, but only if the intermediate point (either three or five spaces from the starting point) is also open.

--Doubles are played twice. For example, a 6-6 roll is played as 6, 6, 6, and 6.

--If a player can play one number but not both, the player must play the higher die number.

First checker away: Initially, each player can only move one checker. A player must pass the first

checker past the opponent's starting point before the player can move any other checker.

No hitting: A major difference between vevga and other forms of backgammon is that there is no hitting and sending checkers to the bar. Instead, players slow each other down by using blocks.

Limitation on primes: A player may not block all six points in the player's first quadrant, or in the opponent's first quadrant. If a player has built a six-anchor prime, and the opponent has collected all of his checkers onto the one point behind the player's six-anchor prime, then the player must unblock a point in that prime to allow the opponent a chance to move.

Bearing off: Once a player has moved all fifteen of the player's checkers into the goal quadrant, the player may begin bearing off. The player may bear off a checker by rolling a number that corresponds to the point on which the checker is located, then removing the checker from the board. The position point closest to the edge of the board corresponds with the die number of 1, the one next to it to a die number of 2, and so on, until the position point in the goal quadrant that is located closest to the middle of the board corresponds to a die number of 6. If there is no checker on the point indicated by the roll, the player must make a legal move using a checker on a higher-numbered point. If there are no checkers on higher-numbered points, the player must remove a checker from the highest point that has a checker.

Scoring: The first player to bear off all his or her checkers wins the game and scores one point. If the winner bears off all his or her checkers before the loser has borne off any, the player wins two points.
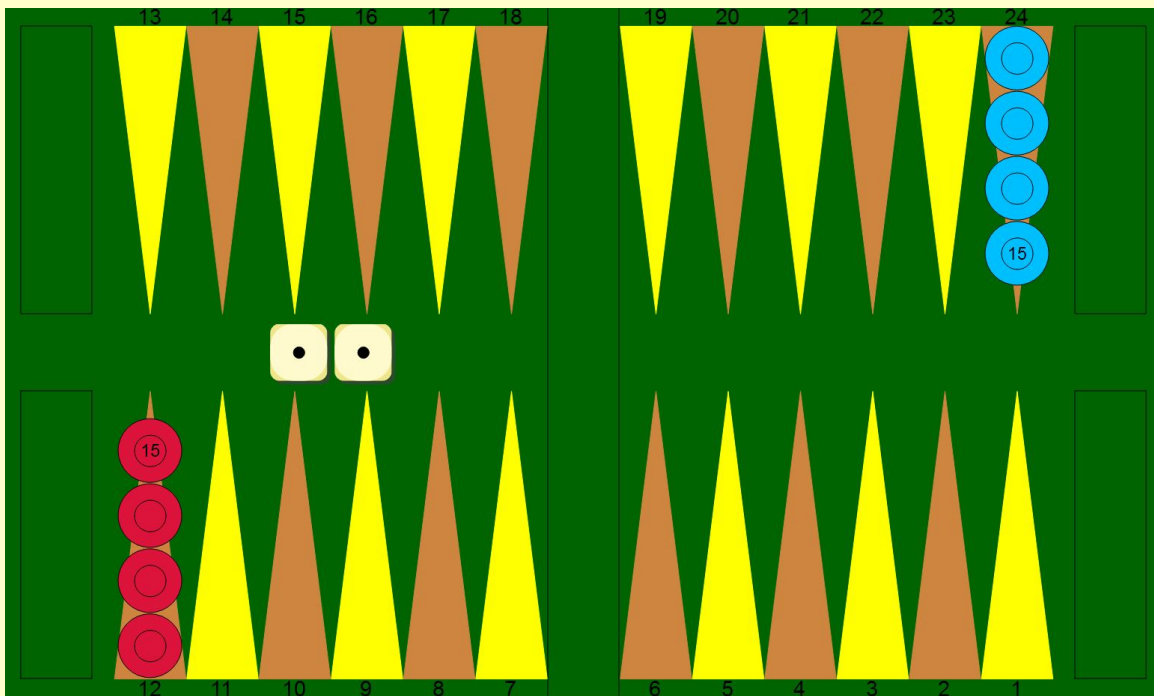

Fig. 1: Fevga initial opening game position. The board can be divided into four quadrants. Blue's first quadrant consists of position points 19-24, blue's second quadrant consists of position points 13-18, blue's third quadrant consists of position points 7-12, and blue's fourth of goal quadrant consists of

position points 1-6. For red, points 7-12 are red's first quadrant, 1-6 are red's second quadrant, 19-24 are red's third quadrant, and 13-16 are red's fourth or goal quadrant. Both blue and red move in the same direction, counter-clockwise, towards their respective goal quadrant. This may make the game seem confusing at first, but with experience, the logic and conceptual unity of the game becomes more evident to the mind.
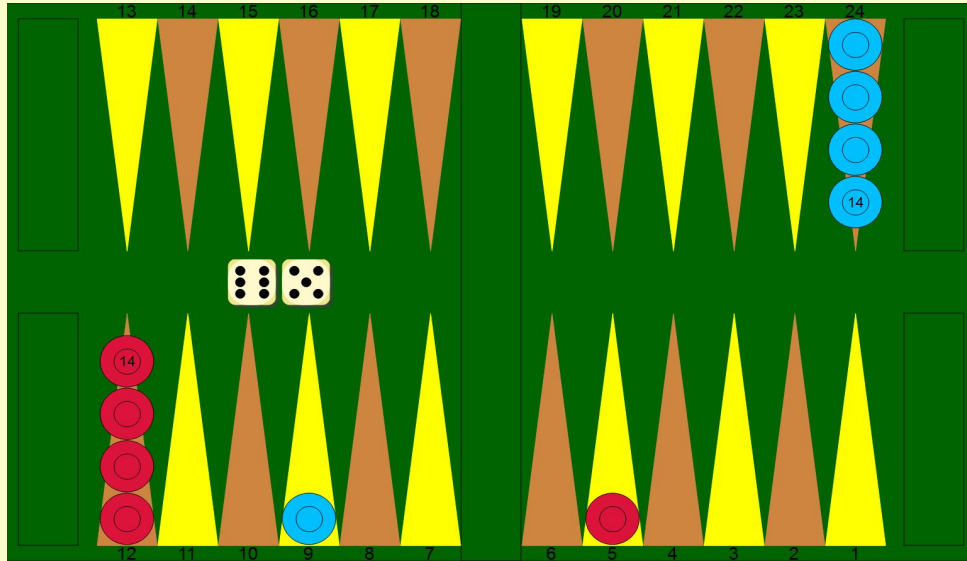

Fig.2: Example fevga opening game position shows how both players, at first, can only play one checker. Each player must move that first checker past the opponent's 1-point pileup point before that player is allowed to play a different checker from the first checker played. In this position, blue has moved a checker past red's checkers piled up on red's 1-point, which is the 12-point in the numbering of this fevga board. Blue now has the option of playing blue's 9-point checker on the next roll, or playing other checkers from blue's 1-point (which is the 24-point in this illustration). Red, however, has a checker on the 5-point, and this checker must be moved past blue's checkers on the 24-point before red can move any other checker. Blue is therefore ahead in the race here.
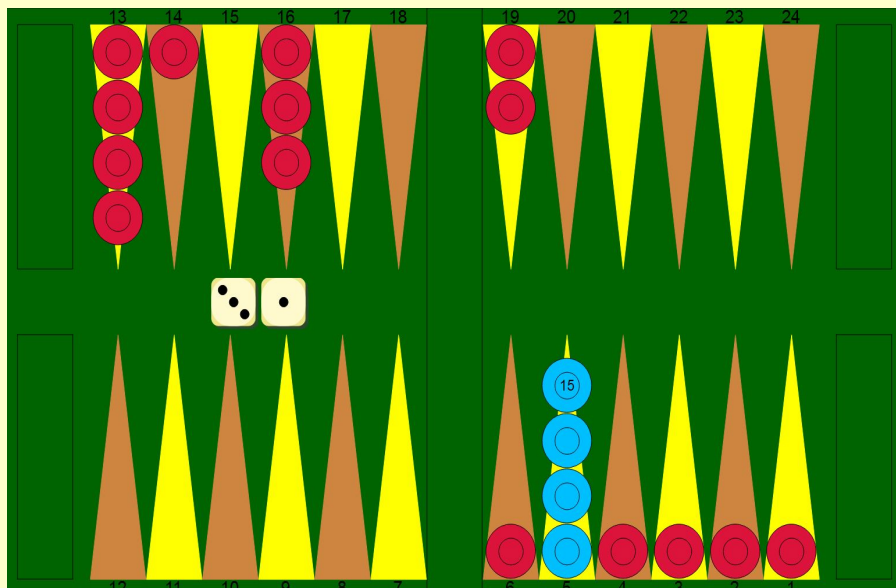
Fig.3: Example fevga position showing how blue has moved all of blue's checkers to blue's goal quadrant. Blue can now begin to bear checkers off the board. Red still has checkers in red's second and third quadrants. However, blue can only bear off a checker if blue rolls a 5 die number, because red has blocked position points 1, 2, 3, 4 and 6.

Fevga Strategy:

One general tactic in fevga is to try to accomplish more than one useful task with the dice roll. This generally means that each die number should be used to accomplish one useful task, instead of using both dice numbers to accomplish only one useful task. Often, the cost of using both dice numbers to achieve only one useful goal is too high, compared to the advantages generated by using each die number to accomplish one useful goal, for a total of two useful goals.

Another general tactic in fevga is to try to make as many blocks as possible on the board. Having many blocks slows down the opponent. In addition, the more spread out a player's checkers are, the more likely will later dice rolls will enable a player to accomplish useful goals with the dice rolls.

In the fevga opening game, after moving the first checker past the opponent's 1-point or origin-point checkers, generally the best way for a player to play the dice is to try to form as many defensive anchors as is possible in the player's first quadrant. For example, with a roll like 3-2, a player should unstack two of the player's origin-point checkers, forming two defensive blocks in the player's first quadrant. It is very important to quickly form defensive blocks in a player's first quadrant, because if the opponent occupies these position points instead, the opponent's blocks in the player's first quadrant can be very powerful ways of preventing a player from moving the player's origin-point checkers forward.
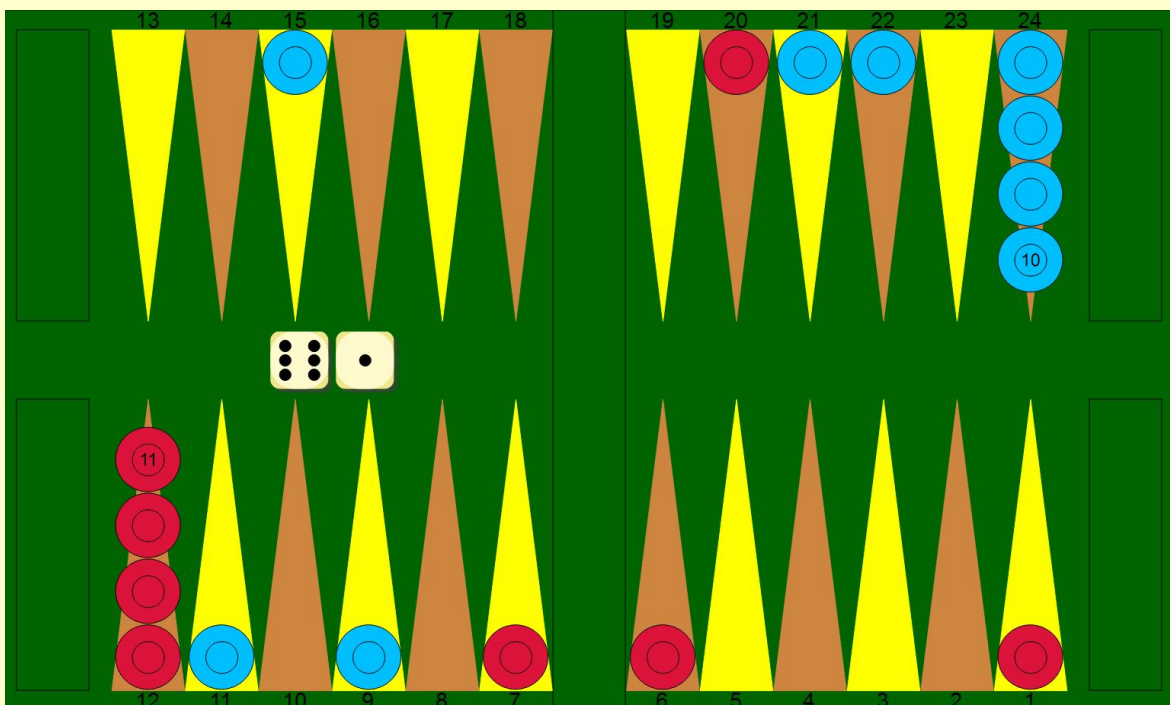

Fig.4: Blue has rolled 6-1. Normally, in the fevga opening game, a player's priority is to unstack the

player's checkers from the origin point. The advantages of unstacking these 1-point checkers is that a player can create defensive blocks in the player's first quadrant, which prevents the opponent from forming blocks in the player's first quadrant. An opponent's blocks placed in a player's first quadrant in the opening game are particularly harmful to a player, since these opponent blocks can potentially block a player's 1-point checkers in that player's first quadrant. This can greatly slow down a player's game. Normally, then, blue should unstack two 1-point or origin-point checkers, by playing 24/23 24/18. However, blue has the opportunity to accomplish something more useful. By playing 15/9 9/8, blue can add a new offensive block in red's first quadrant. Blue already has two offensive blocks in red's first quadrant, which are helping to trap 11 of red's checkers on red's origin-point (the 12-point). If blue makes the 8-point block, blue will have three blocks in red's first quadrant, helping to block those eleven red origin-point checkers. One of the most valuable assets in fevga is to have blocks located in the opponent's first quadrant, behind which are numerous opponent checkers. The value of putting an offensive block in red's first quadrant, helping to trap eleven of red's checkers, early on in the opening game, is so high that playing 15/9 9/8 is significantly better than the conventional play of unstacking two origin-point checkers, via 24/23 24/18.

In fevga, one key tactic for slowing down the opponent is to form a prime. A prime consists of two or more blocks in a row. If a player forms a six-anchor prime, the opponent cannot pass this prime until the player moves (or is forced to move) one of the blocks from this prime.

Some primes are more valuable than others. A prime in a player's first quadrant is relatively less valuable, because a player will be forced to move this prime earlier in the game. A prime in a player's second quadrant is more valuable than a prime in the player's first quadrant, but a player will also generally be forced to remove this prime relatively soon in the game. Also, if an opponent is forced to pile up checkers behind a prime in the player's second quadrant, the opponent's checkers will be very close to the opponent's goal quadrant, since the player's second quadrant is also the opponent's goal quadrant. As soon as the player removes checkers from the player's second quadrant prime, the opponent will move into the opponent's goal quadrant. Here, the opponent may have a 50% chance or so of winning the game, depending on the game's timing.

The most valuable primes are primes formed in a player's third or goal quadrants, especially if large numbers of the opponent's checkers are blocked behind these primes. However, big dice rolls are needed to form these primes early in the game, when they are more likely to trap large numbers of the opponent's checkers, and therefore be more valuable for a player. Also, if a player uses a big dice roll early in the game to form a block in the player's third or fourth quadrant, the player may be inefficiently using the dice roll. It is often more useful, instead, to use the two dice numbers to unstack two 1-point checkers to form defensive blocks in the player's first quadrant.

The opponent's origin-point checkers are also in the player's third quadrant, and next to the player's goal quadrant, so the opponent can quickly form blocks on position points in the player's third and fourth quadrants. This makes it unlikely that a player will be able to form a big prime in the player's

third and fourth quadrants, before the opponent has formed many blocks there instead.

However, any prime can cause an opponent to significantly slow down the opponent's game. The timing of the game, or how slowed down or accelerated the game timing is, determines how valuable a prime is. Sometimes, a player's second quadrant prime can delay the opponent enough for the player to win the game by a comfortable margin. In general, a prime is only useful if it causes an opponent to lose pips at some point in the game, due to the opponent's checkers being blocked by the player's prime. When forming a prime, a player should always ask, "how would forming this prime, at this location on the board, at this time during the game, slow down the opponent, given the current timing of the game?" If the answer is that the prime probably will not slow down the opponent, there might not be much gain to using up dice numbers to form that prime.
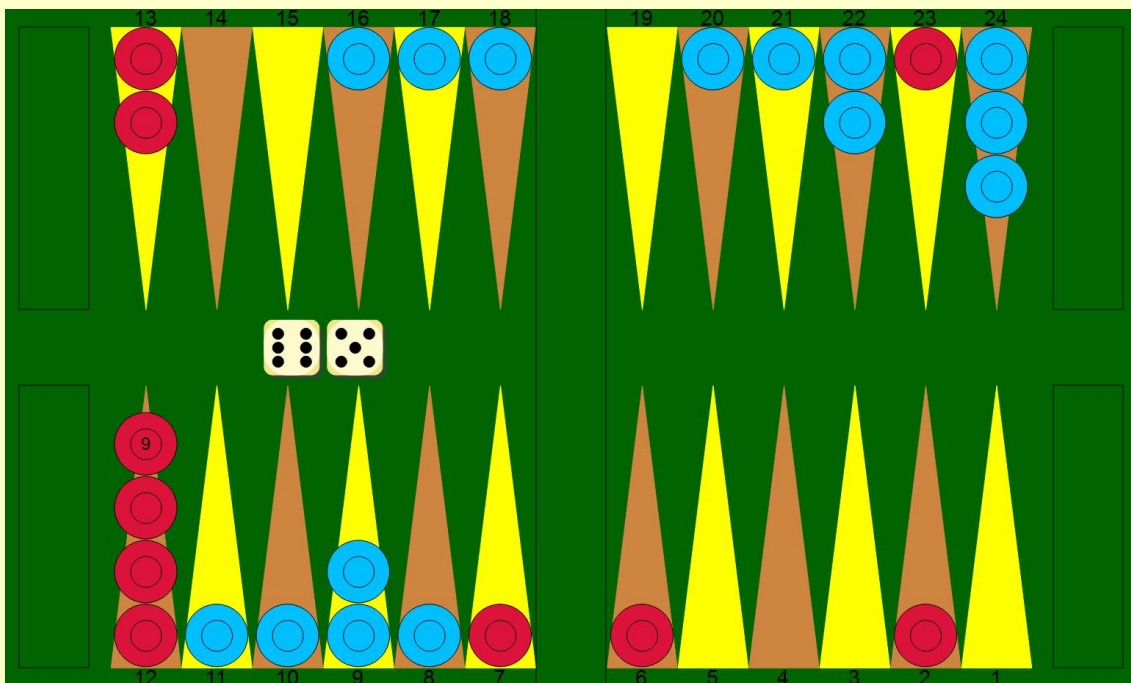

Fig.5: Notice how blue has four blocks in a row on the 8, 9, 10 and 11 points. A row of blocks is called a prime. Here, blue has a four-anchor prime from points 8 to 11. In addition, blue has six blocks from the 16 to the 22 points, with a gap on the 19-point. Having multiple blocks or traps in a row is a potentially powerful way of slowing down the opponent. Blue's six blocks on the 16 to the 22 points are less useful because these blocks are located in blue's first or second quadrants. Blue will soon be forced to move those blocks. These blocks are also less valuable because even if red is trapped behind blue's first and second quadrant blocks, red will be relatively close to red's goal quadrant (the 13-18 points). Therefore, as soon as blue removes those blocks, red can quickly enter checkers into red's goal quadrant. However, blue's four-anchor prime in blue's third quadrant (or red's first quadrant) on the 8 to 11 points, is far more powerful than blue's first and second quadrant blocks. Blue's four-anchor prime is blocking nine of red's origin-point checkers (located on the 12-point). Red may have difficulty moving red's origin-point checkers past blue's four-anchor prime, because only 5 or 6 die numbers will allow red to move checkers beyond blue's 4-anchor prime. Blue's four-anchor prime

may force red to lose pips in the racing game. This illustration shows how the most powerful prime in fevga is one located in an opponent's first quadrant, such that many of the opponent's origin-point checkers are blocked behind the player's prime.   However, it is difficult to form a prime in an opponent's first quadrant, because one needs multiple rare high-numbered dice rolls in the opening game to form such a prime efficiently.
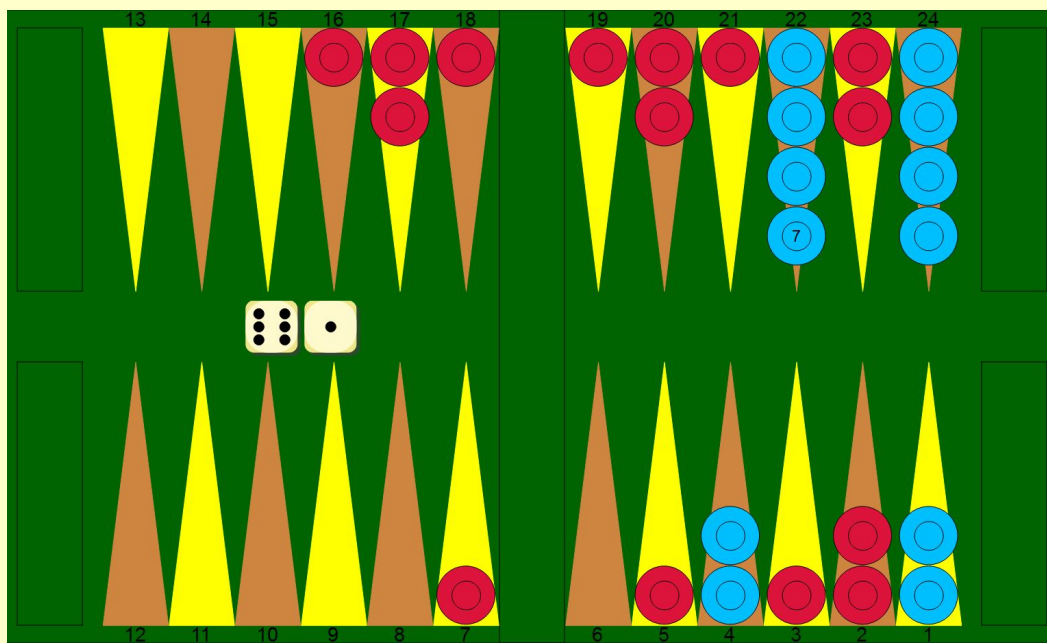

Fig.6: Red has formed a six-anchor prime connecting blue's first and second quadrants, that is blocking eleven blue checkers behind it. This is essentially the most powerful kind of prime possible in fevga, and will essentially guarantee victory for red. Note the pileup of seven blue checkers behind the 21-point red block at the backend of red's prime.
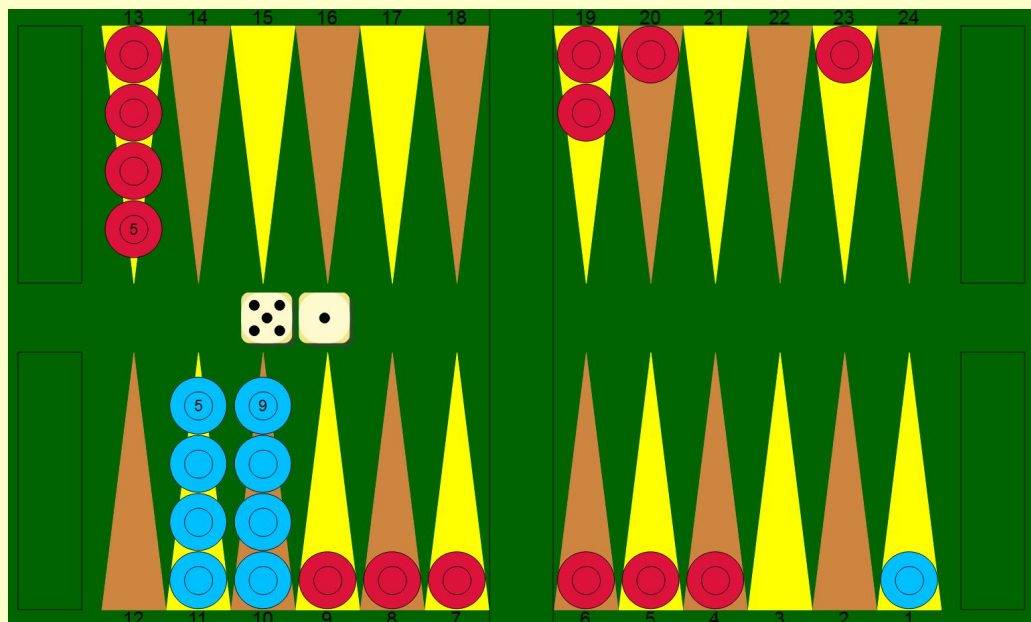

Fig. 7: Red has formed a six-anchor prime that connects red's first and second quadrants. Although this prime is normally not very powerful, in this case, the timing of the game is such as to cause blue

to be forced to pile up checkers behind red's six-anchor prime. Blue is losing pips in the game due to red's prime. Red will try to put as many checkers on the 13-point (the last position point in red's goal quadrant) as is possible before red is forced to break up red's prime. Red will also try to shift the prime forward while leaving the prime intact, instead of breaking up the prime, if the dice give red the ability to do so. Blue's piled up checkers are very close to blue's goal quadrant, but red should be able to delay blue enough so that red eventually wins the game. Any prime can delay the opponent, but only if the game timing is right.

The most inner position points in a player's goal quadrant are also potentially very useful as blocks, because a player forming a block on these points could potentially connect those blocks to other player blocks located in the player's first quadrant. Also, forming blocks on these most inner points can make it more efficient to bear off checkers later during the bearoff stage of the game, because the last two points of the goal quadrant are the points from which it is most efficient to bear off checkers.
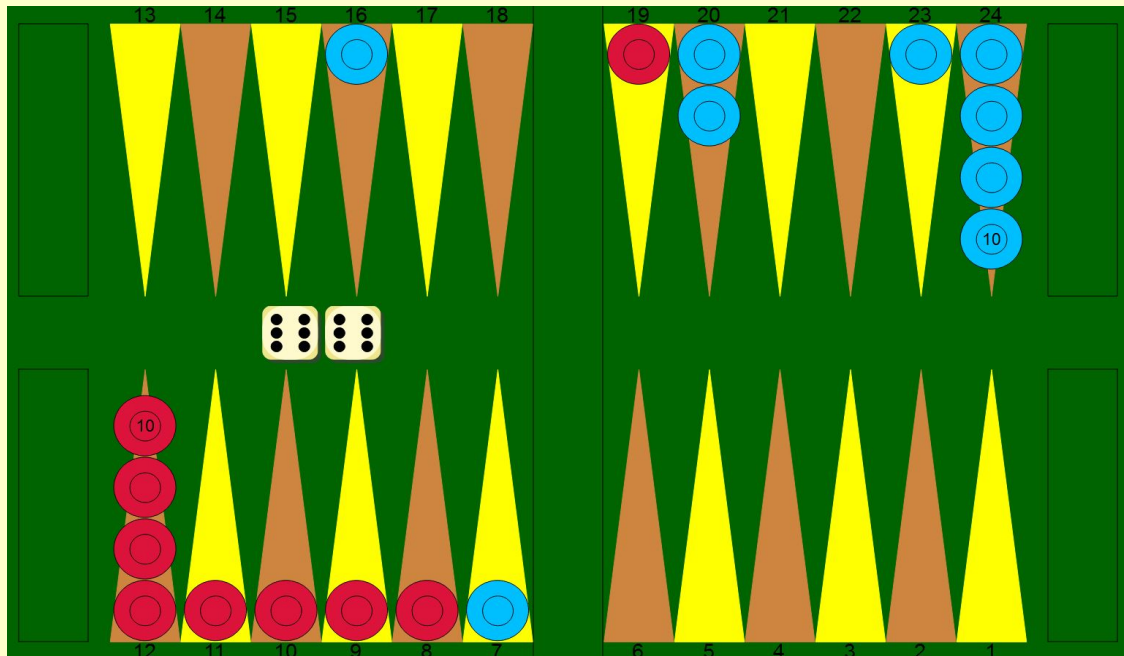

Fig.8: Red has rolled 6-6. One obvious way to play the 6-6 is by unstacking four origin-point checkers, via 12/6 12/6 12/6 12/6. This would improve red's mobility, create a new defensive block on the 6-point, and give red spare checkers for making other defensive blocks in red's second quadrant. However, this is not the best play. Notice how, with one of the 6's, red can form a 13-point block, via 19/13. This block would be on the last position point in red's goal quadrant, so that this block will never move, and will give red an anchor point to be able to put checkers on the last position point in red's goal quadrant, from which red can most efficiently bear off checkers during the bearoff period of the game. In addition, the 13-point block combines with red's blocks in red's first quadrant to form a long prime, that might block blue's game. 19/13 is the best use of at least one of the 6 die numbers. After playing 19/13, red could unstack three 1-point checkers, via 12/6 12/6 12/6. However,

there is a better play than that. Red could move the 9-point checker to the 21-point, via 9/3 3/21, and then use the remaining 6 die number to play 12/6. The advantage of 19/13 12/6 9/3/3/21 is that red accomplishes three useful things with the double 6, versus accomplishing only one or two useful things. 19/13 12/6 9/3/3/21 makes the 13-point block, unstacks a red 1-point checker, and forms a strong offensive 21-point block in blue's first quadrant, to replace the 19-point block that was shifted to the 13-point. With the 21-point block, red helps to block in blue's origin-point checkers, but with a lucky roll, red might also be able to move the 21-point block to the 14-point, which would form a two-anchor prime on the last two position points in red's goal quadrant. This two-anchor prime can then connect with the blocks in red's first quadrant to form longer primes. Hopefully, red will roll a 4 die number on the next roll, so that red can replace red's 9-point block that red just removed. Making the 9-point block will give red a 6-anchor prime from the 13 to the 8 points, which might block blue's game considerably, if red can maintain this prime for a long period of time.

Also, in figure 8, note how blue has a block in red's first quadrant, located on the 7-point. It is more useful for a player to have an offensive block located in the opponent's first quadrant, if the offensive block is located at the far end of the opponent's first quadrant, towards the center of the board. When the player's block is located towards the board center, the opponent has a more difficult time forming large primes that connect the opponent's first and second quadrants, because the mid-board player's block would divide up that potential large prime. Also, a mid-board block is closer to the player's goal quadrant compared to blocks located farther away in the opponent's first quadrant. Therefore, if a player lands checkers on the player's mid-board block, the player's checkers will have easier access to the position points in the player's goal quadrant.
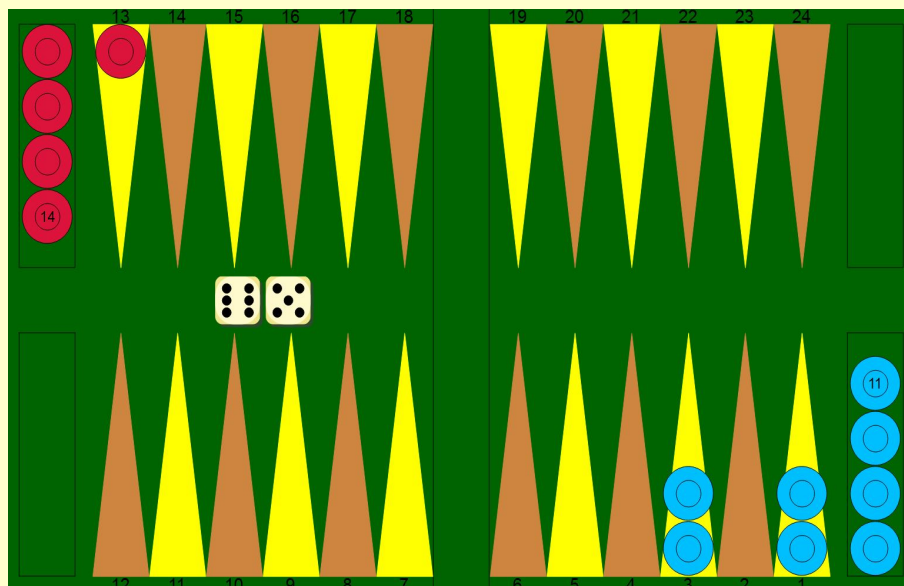

Fig.9: Blue has just rolled a 5-6, and can bear off two checkers from the 3-point. However, red is now guaranteed to win this game, because red has only one checker left, that red will bear off next turn. Blue could only have won this game if blue rolled double 6's, 5's, 4's or 3's. Blue had only a 4/36 probability, or approximately 11% chance, of doing so.